

SVEUČILIŠTE U MOSTARU
FAKULTET GRAĐEVINARSTVA,
ARHITEKTURE I GEODEZIJE

SEMINARSKI RAD

KOLEGIJ: INTEGRIRANO PROJEKTIRANJE

TEMA: NACRT ARMATURE TEMELJNE KONSTRUKCIJE

IZRADILI:

MARTINA MORO

ANDRIJA MATIĆ

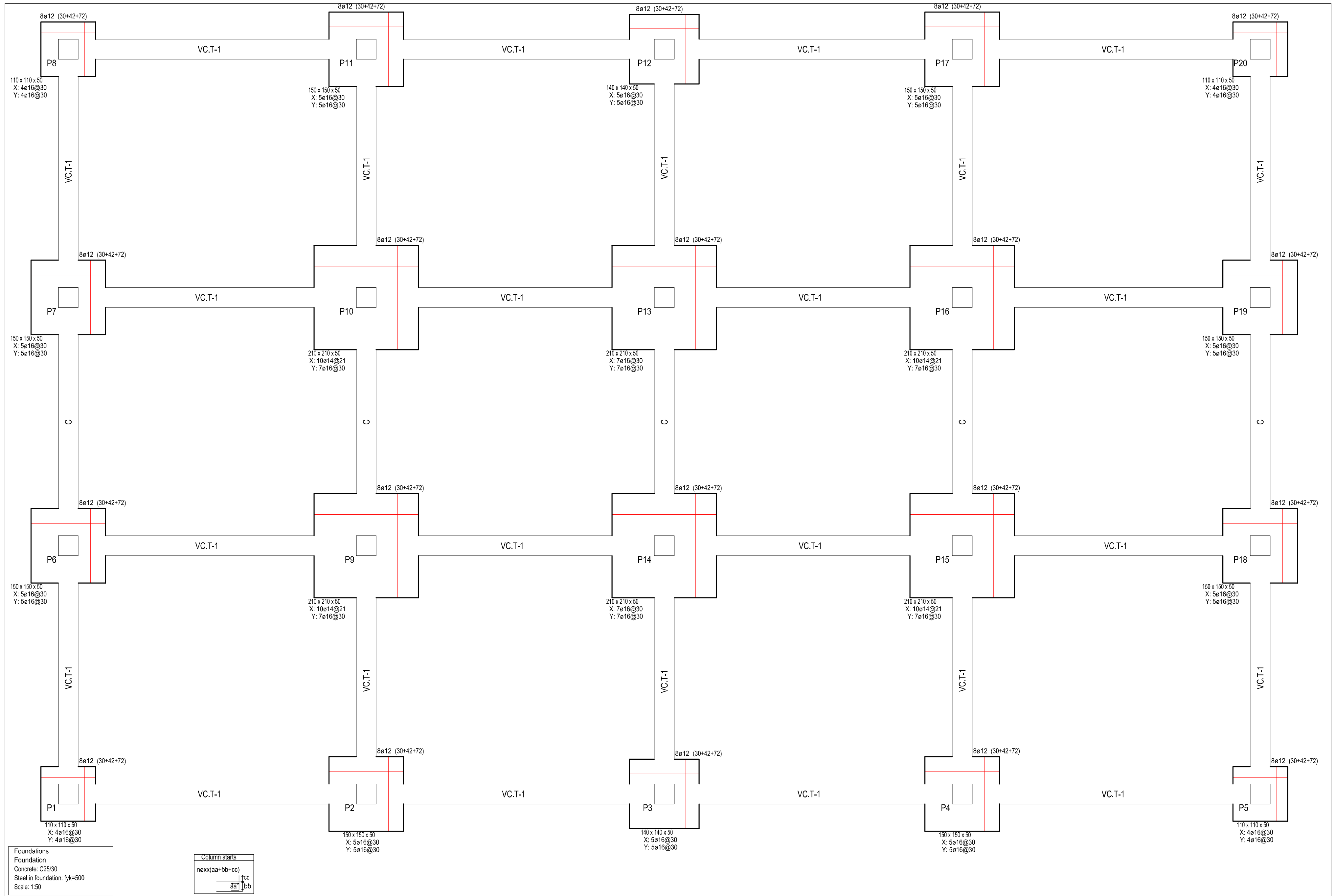
MOSTAR, RUJAN 2022

Zadatak našeg seminarskog rada iz kolegija Integrirano projektiranje bio je nacrtati armaturu temeljne konstrukcije tlocrtne površine min 10x20m, koja se sastoji od temeljnih traka i temelja samaca u nekome od BIM programa.

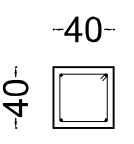
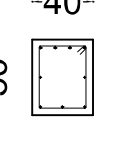
Naša temeljna konstrukcija dimenzija je konačnih dimenzija 24x15m, i sastoji se od temeljnih traka kao i temeljnih samaca. Zadatak smo obavili u BIM programu "CYPE". Proizvoljno smo odredili geometriju temeljne konstrukcije uzimajući u obzir minimalne preporučene dimenzije konstrukcije, te usvojili temeljnu konstrukciju dužine $6 \times 4 = 24\text{m}$, a širine $5 \times 3 = 15\text{m}$. Temelji samci nalaze se na svakih 6 m dužinski, odnosno na svakih 5 m po širini konstrukcije.

Konstrukciju smo opteretili stalnim opterećenjem od 3 kN/m^2 , te korisnim opterećenjem, također 3 kN/m^2 . U skladu sa zadanim opterećenjem, program je regulirao i generirao potrebne dimenzije temeljnih traka, kao i temeljnih samaca koje su na kraju i usvojene. Nacrt armature temeljne konstrukcije također je rađen u programu "CYPE".

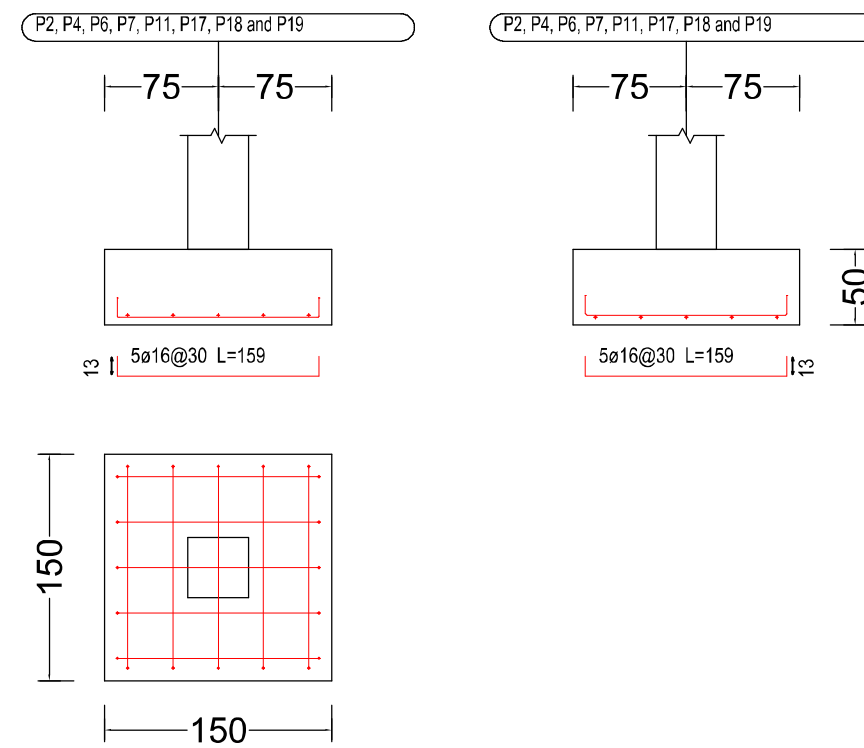
Na kraju željeli bismo reći kako smo iznimno zadovoljni načinom rada CYPE programa koji je relativno jasno formuliran i kojim je također jednostavno rukovati. Nudi brojne mogućnosti projektiranja i crtanja u mnogim područjima građevinske struke. Program na neki način "komunicira" sa osobom koja radi u njemu na način da daje vlastite prijedloge i dizajne, te upućiva na moguće formirane greške. Sve naredbe su vrlo jasno i precizno definirane, te se brzo mogu riješiti čak i kompleksniji građevinski zahvati.



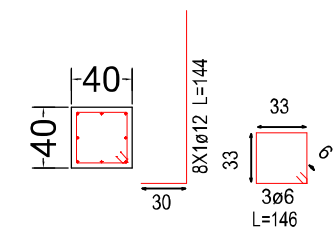
FOUNDATION ELEMENTS BLOCK				
References	Dimensions (cm)	Depth (cm)	Bott. reinf. X	Bott. reinf. Y
P1, P5, P8 and P20	110x110	50	4ø16@30	4ø16@30
P2, P4, P6, P7, P11, P17, P18 and P19	150x150	50	5ø16@30	5ø16@30
P3 and P12	140x140	50	5ø16@30	5ø16@30
P9, P10, P15 and P16	210x210	50	10ø14@21	7ø16@30
P13 and P14	210x210	50	7ø16@30	7ø16@30

Strap beam table	
 <p>C Top reinf.: 2ø12 Bott. reinf.: 2ø12 Stirrups: 1xø6@25</p>	 <p>VC.T-1 Top reinf.: 4ø14 Bott. reinf.: 3ø12 Skin reinf.: 1x2ø12 Stirrups: 1xø8@30</p>

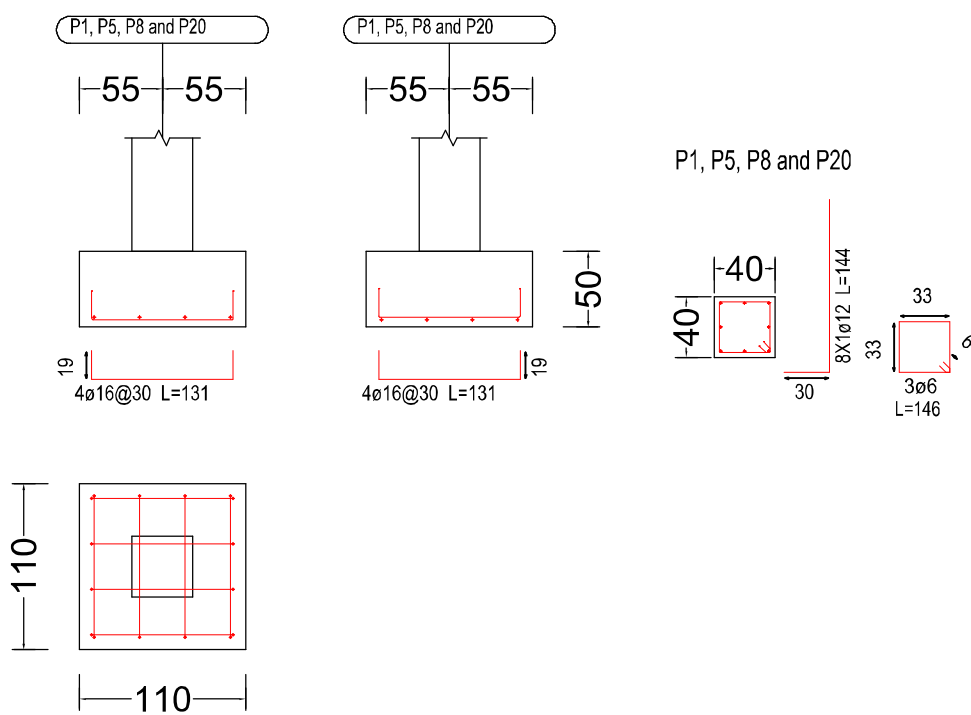
P2, P4, P6, P7, P11, P17, P18 and P19



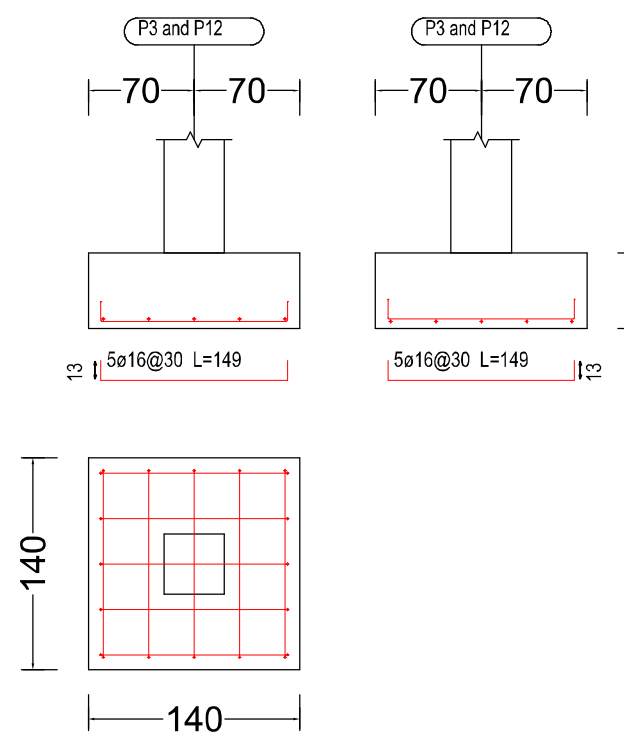
P2, P4, P6, P7, P11, P17, P18 and P19



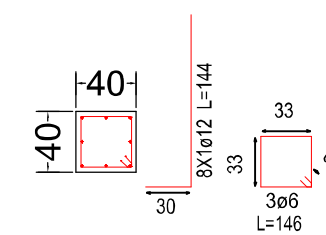
P1, P5, P8 and P20



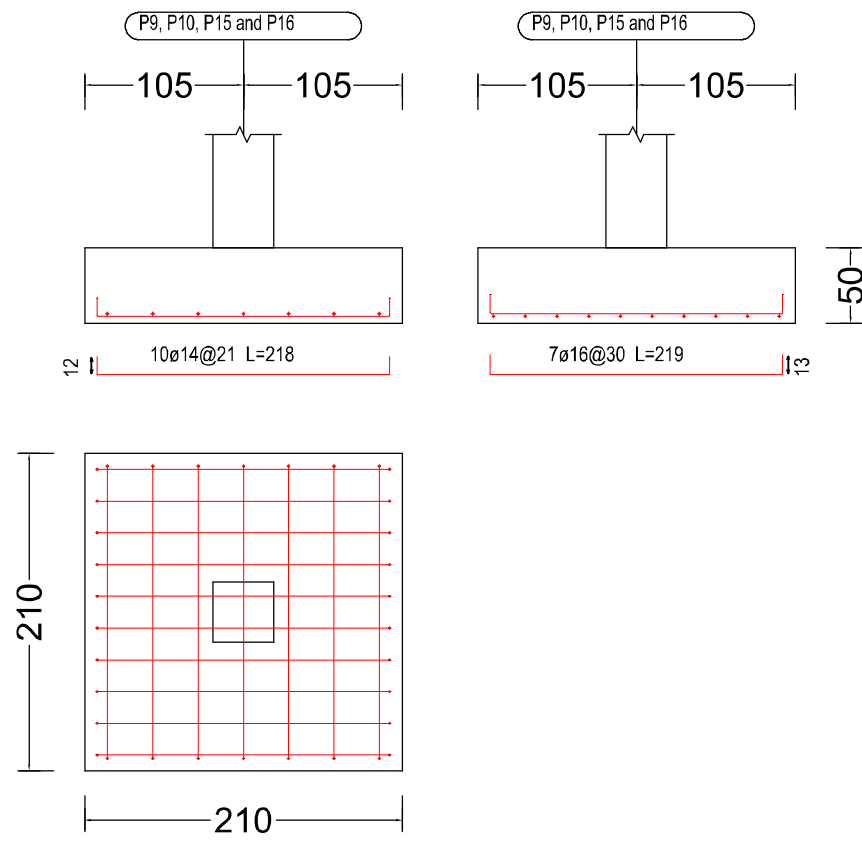
P3 and P12



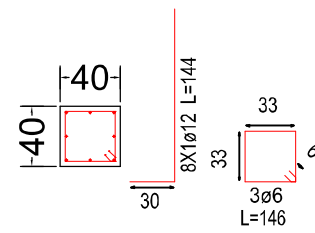
P3 and P12



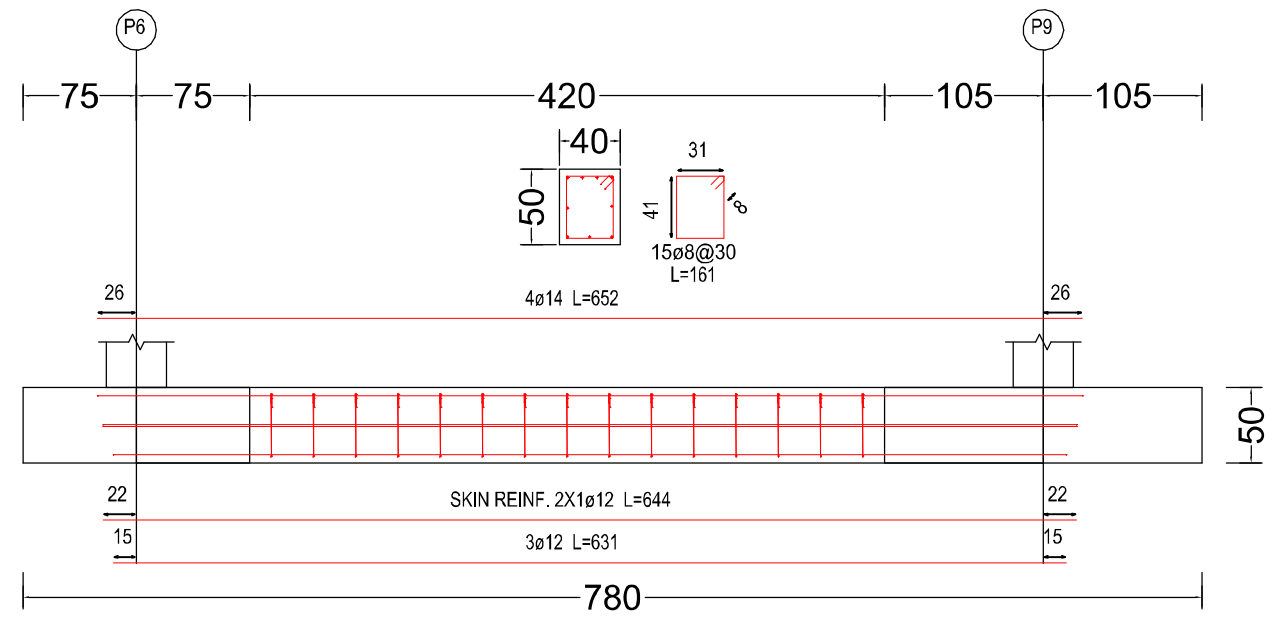
P9, P10, P15 and P16



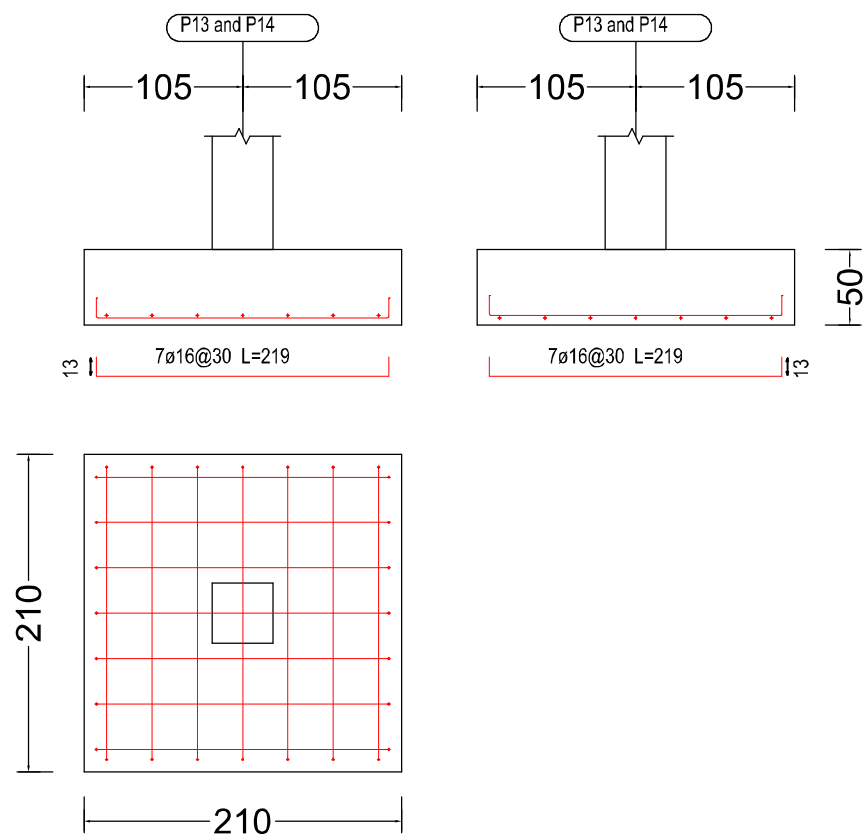
P9, P10, P15 and P16



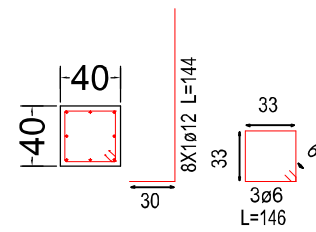
VC.T-1 [P6 - P9]



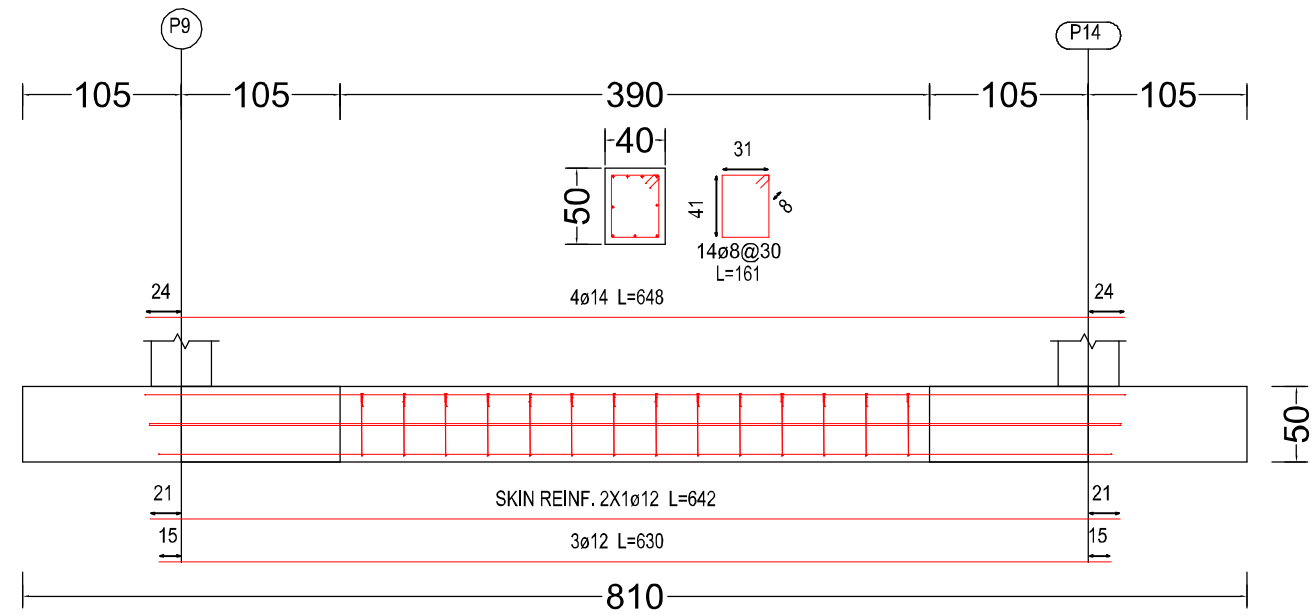
P13 and P14



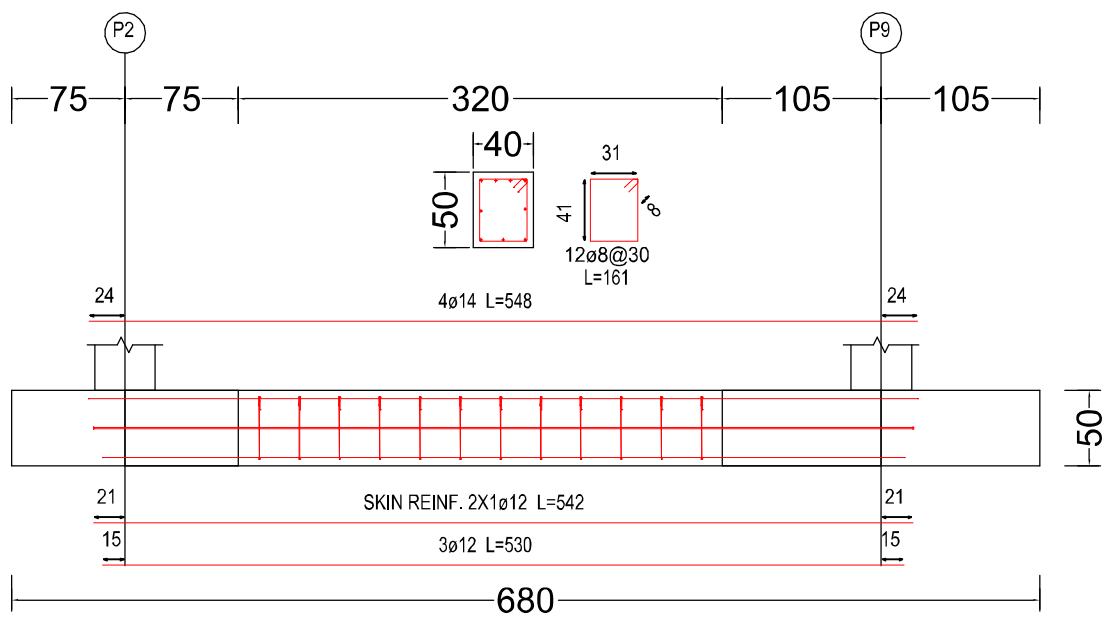
P13 and P14



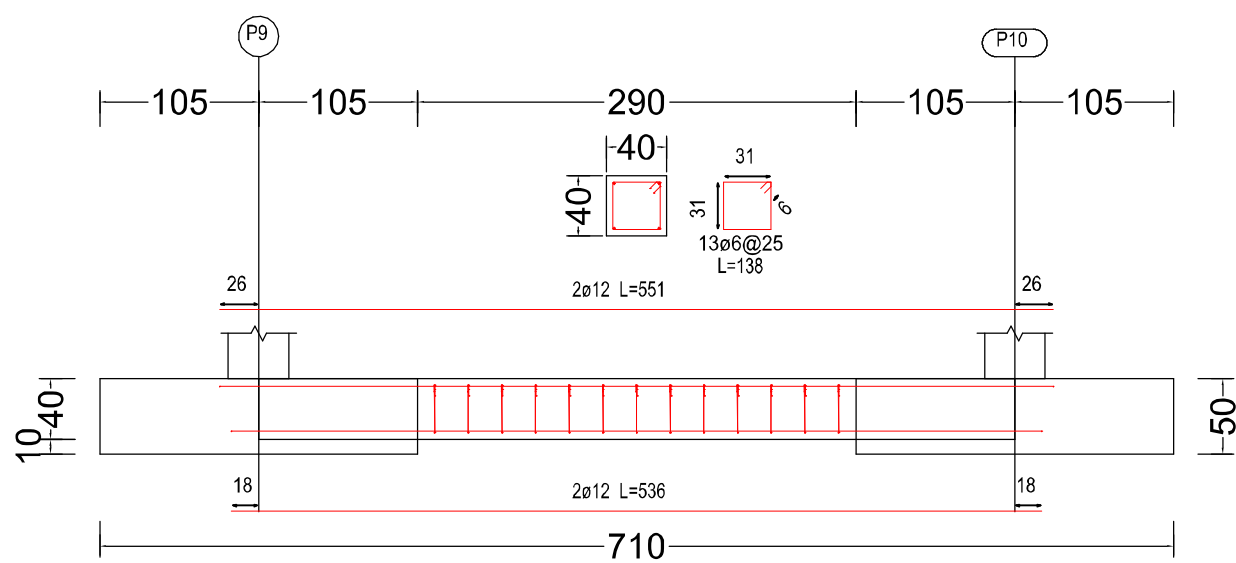
VC.T-1 [P9 - P14]



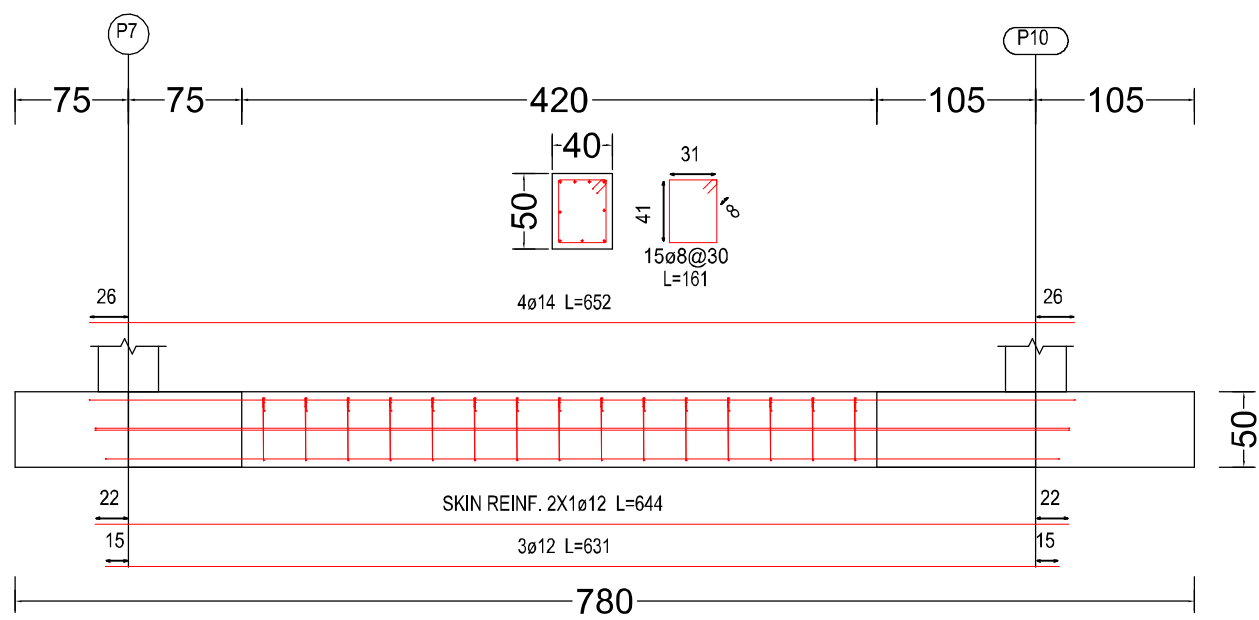
VC.T-1 [P2 - P9]



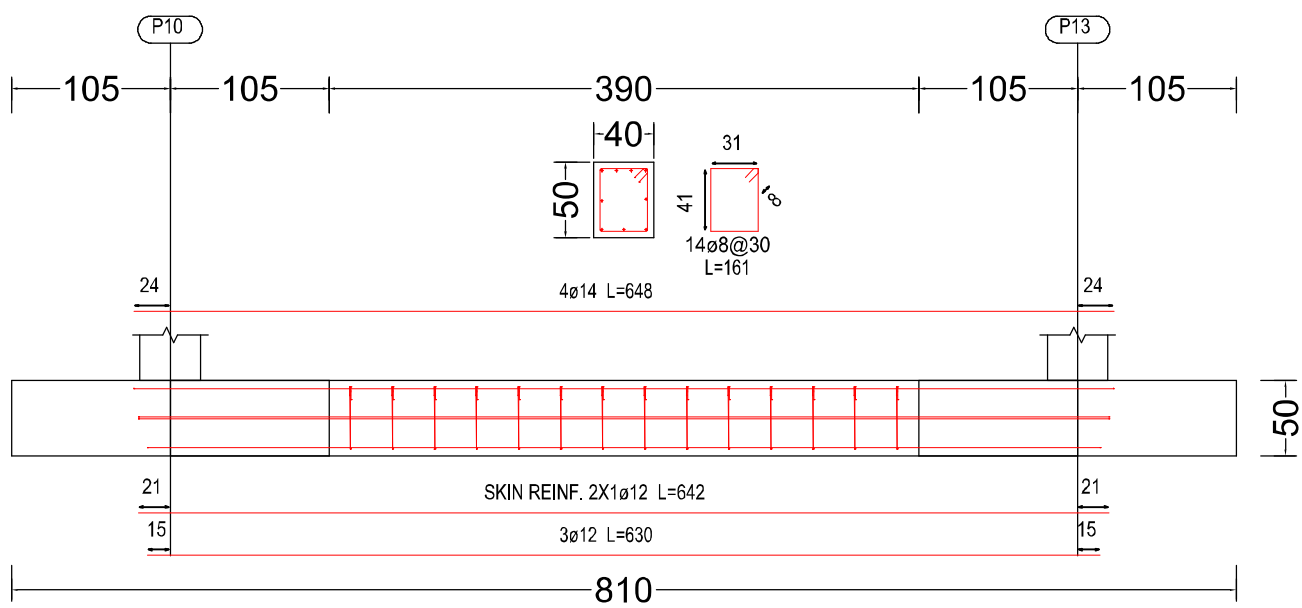
C [P9 - P10]



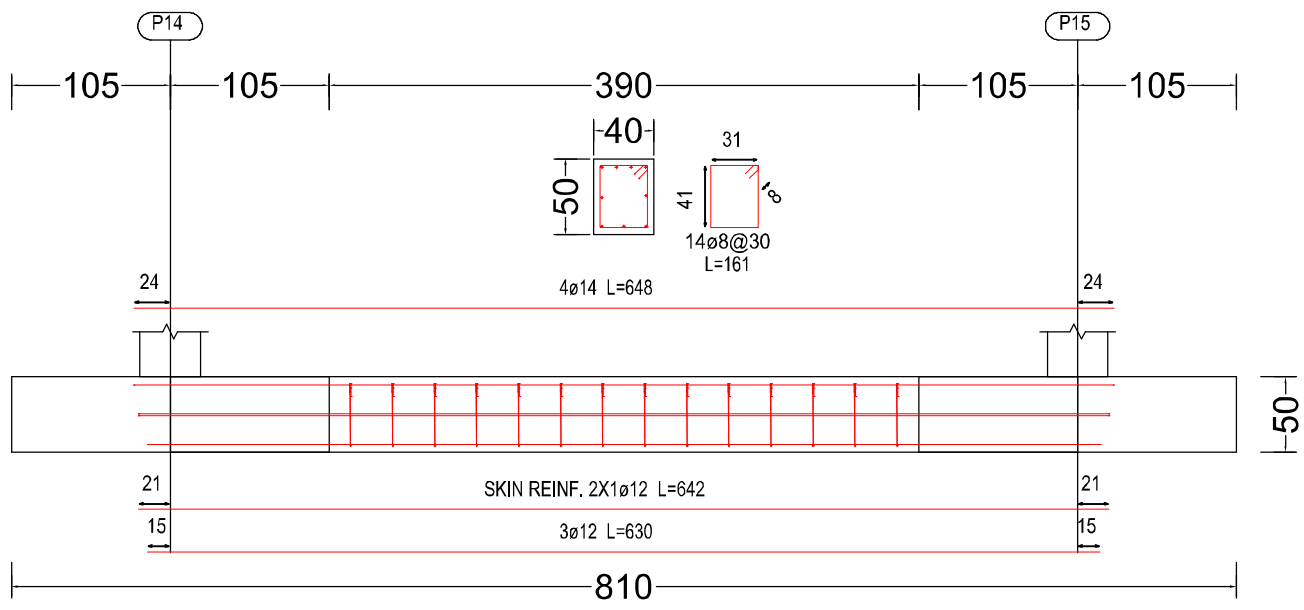
VC.T-1 [P7 - P10]



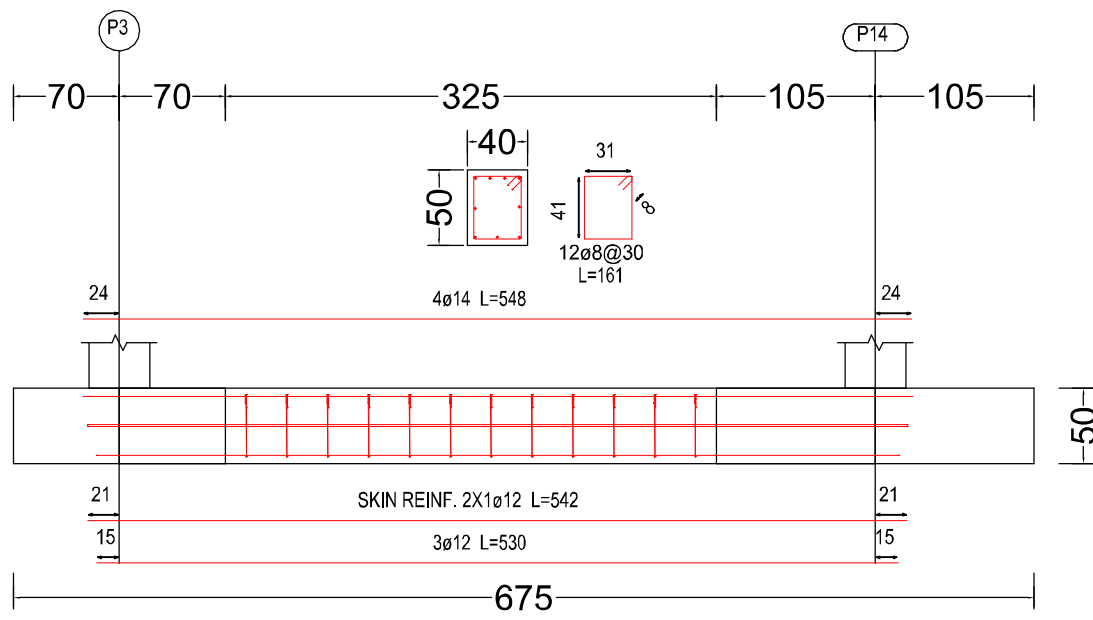
VC.T-1 [P10 - P13]



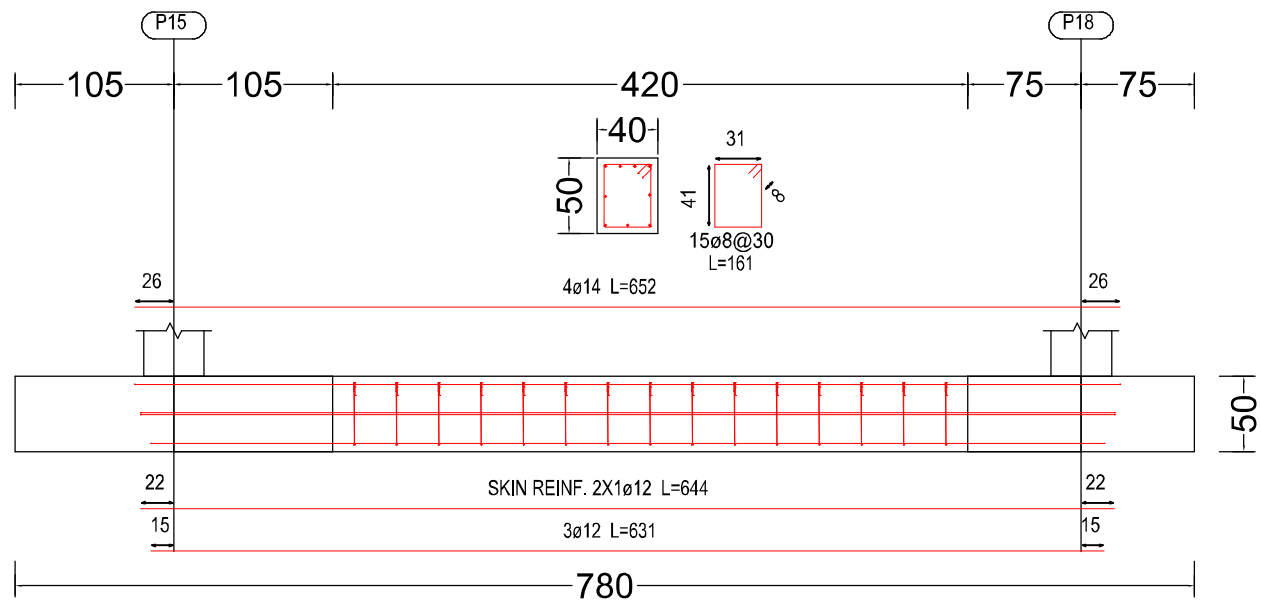
VC.T-1 [P14 - P15]



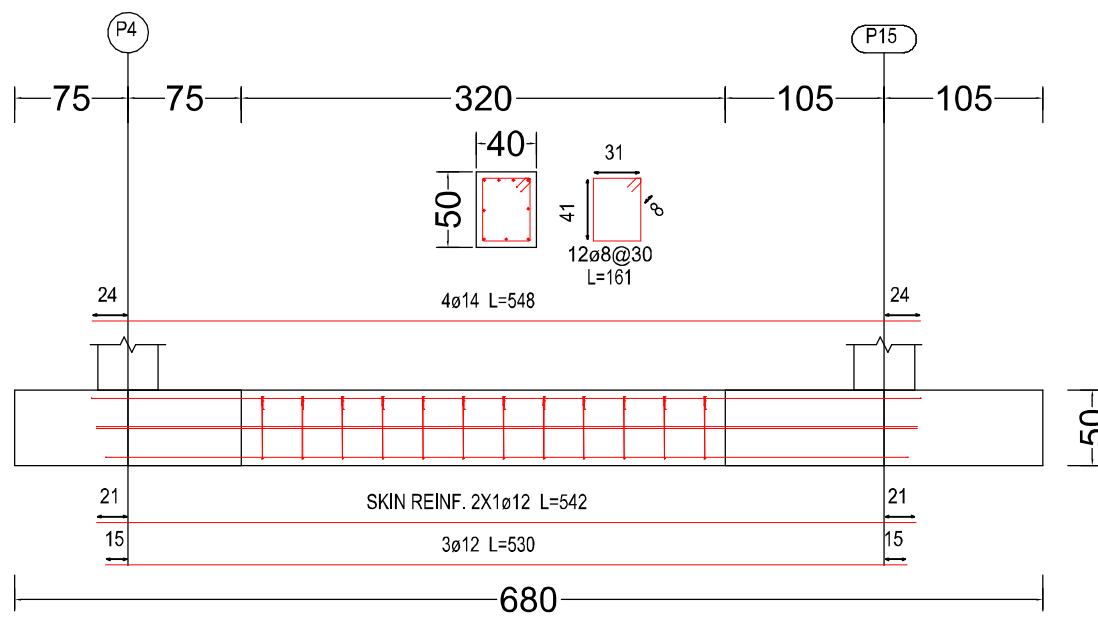
VC.T-1 [P3 - P14]



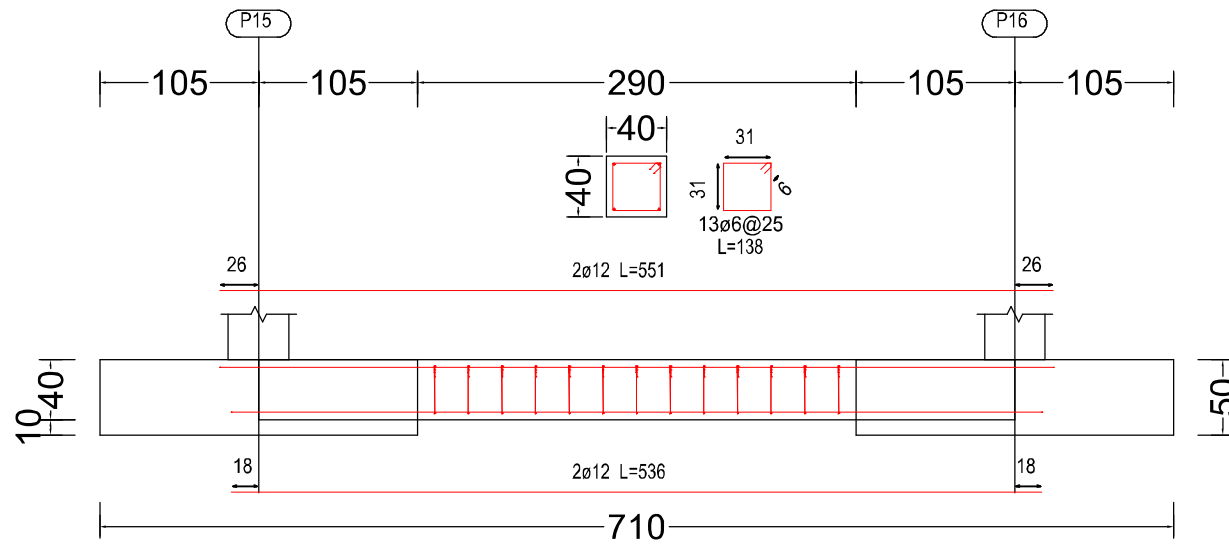
VC.T-1 [P15 - P18]



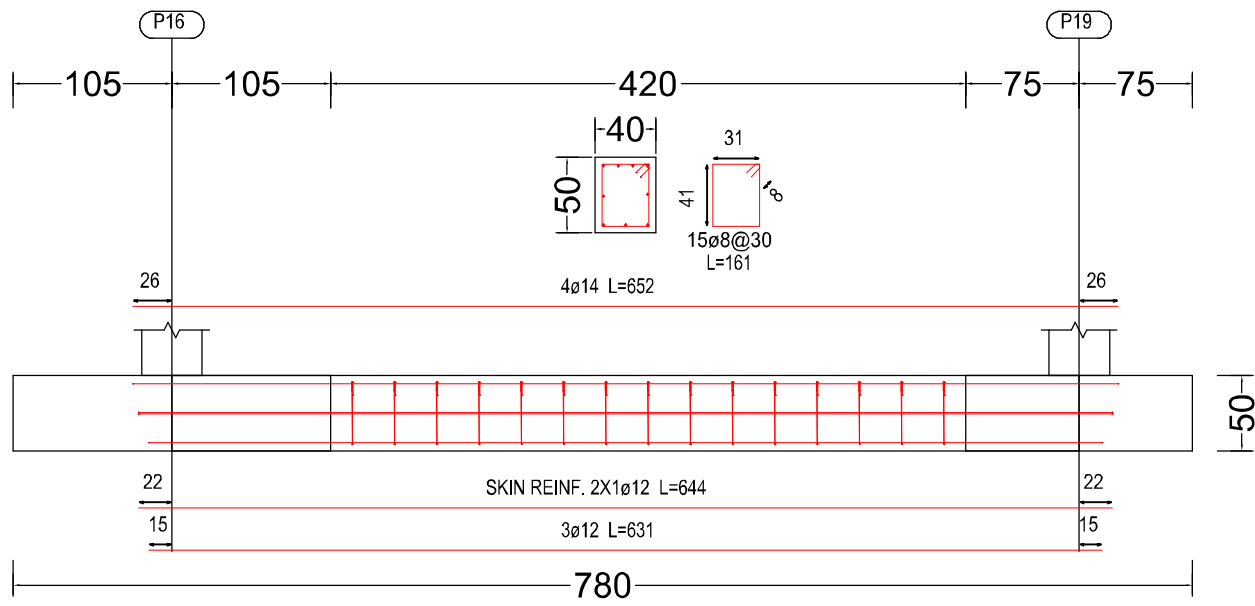
VC.T-1 [P4 - P15]



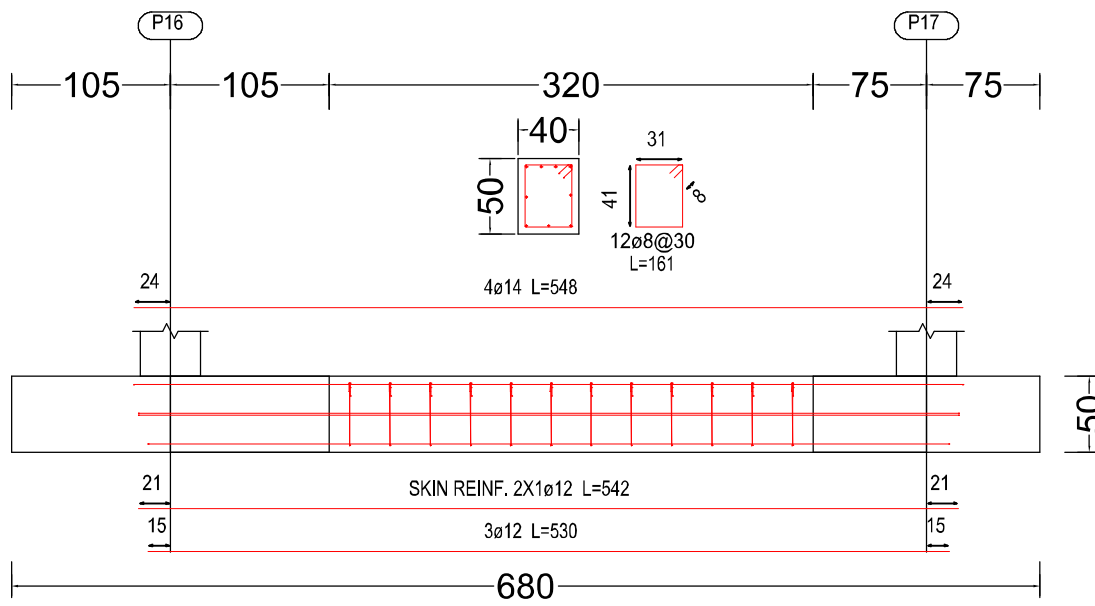
C [P15 - P16]



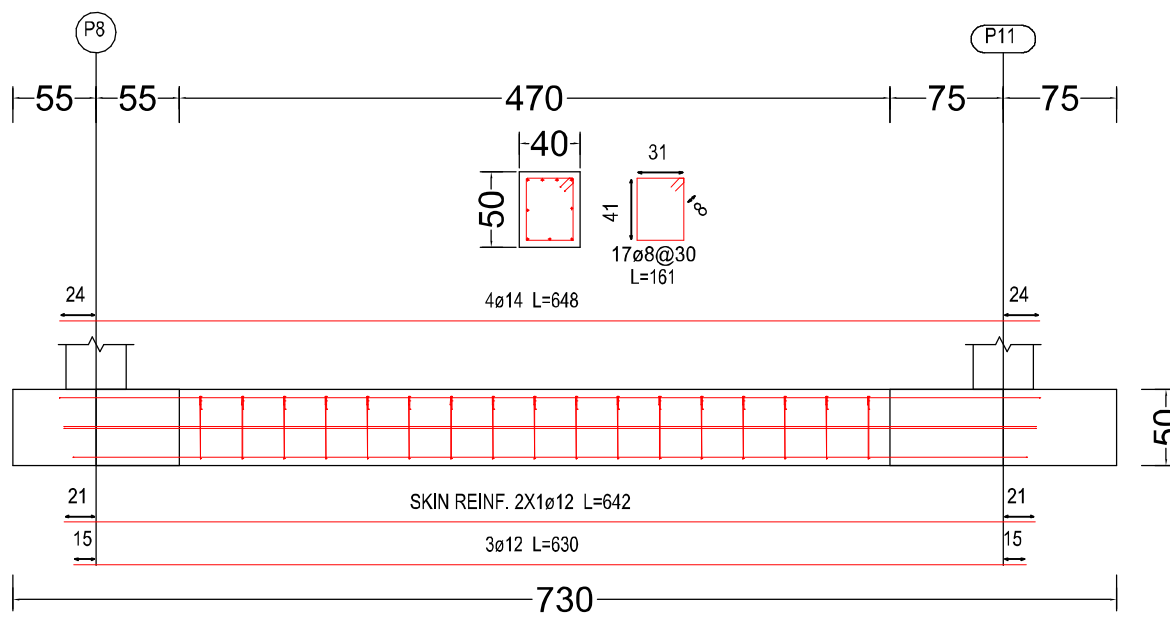
VC.T-1 [P16 - P19]



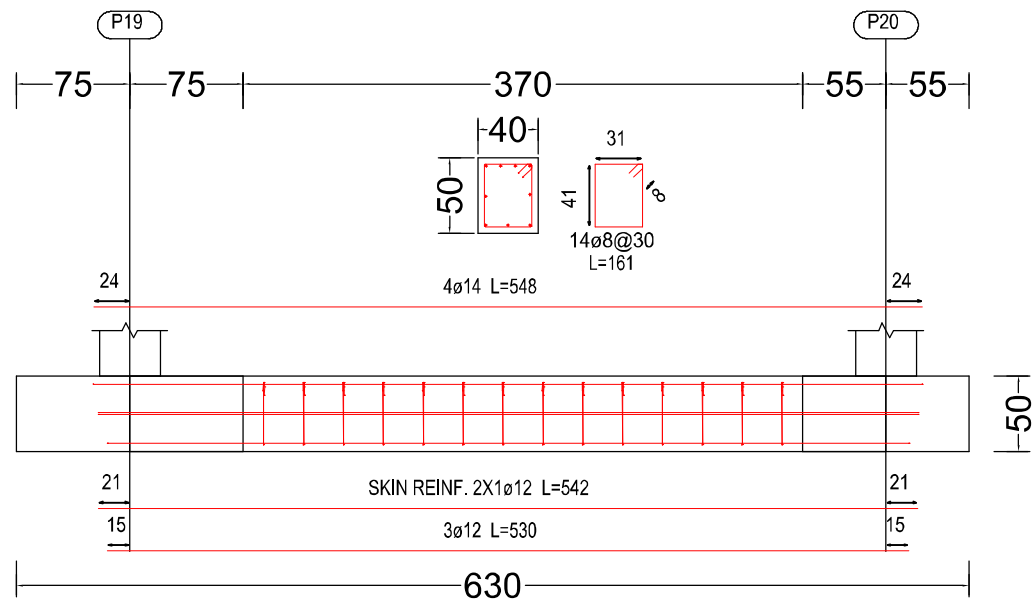
VC.T-1 [P16 - P17]



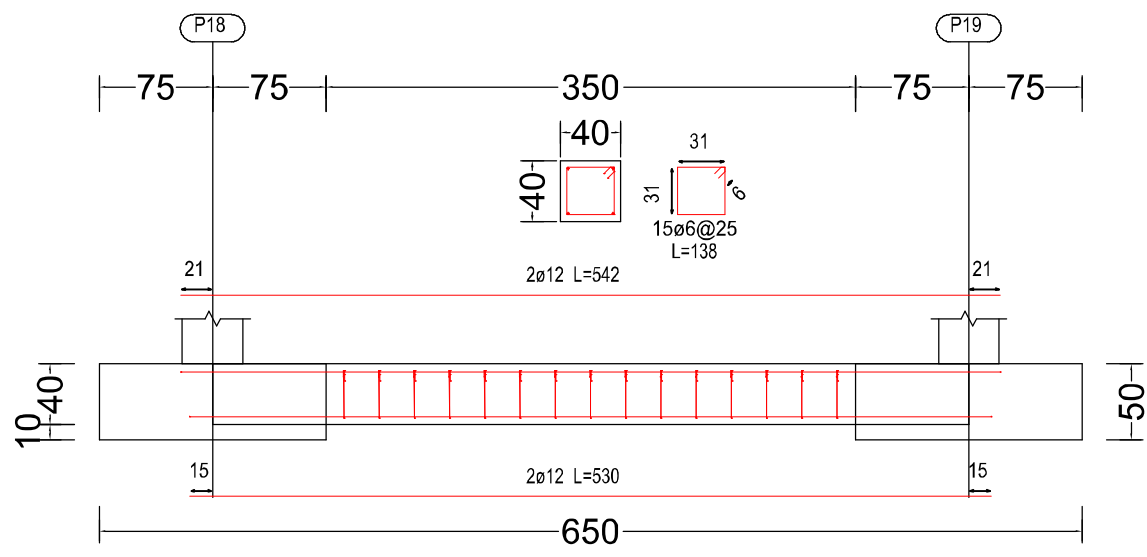
VC.T-1 [P8 - P11]



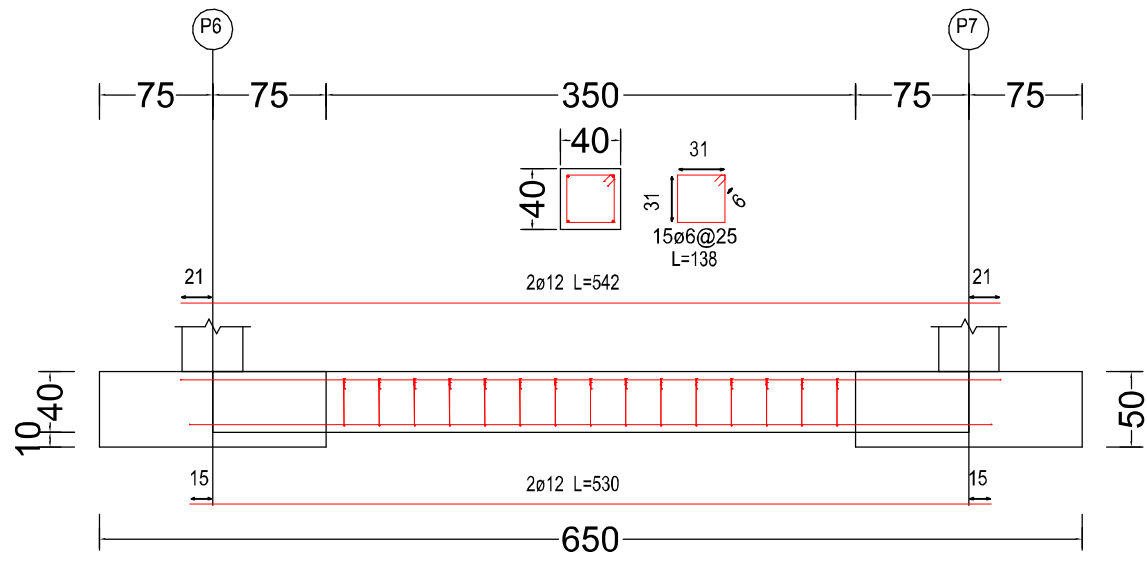
VC.T-1 [P19 - P20]



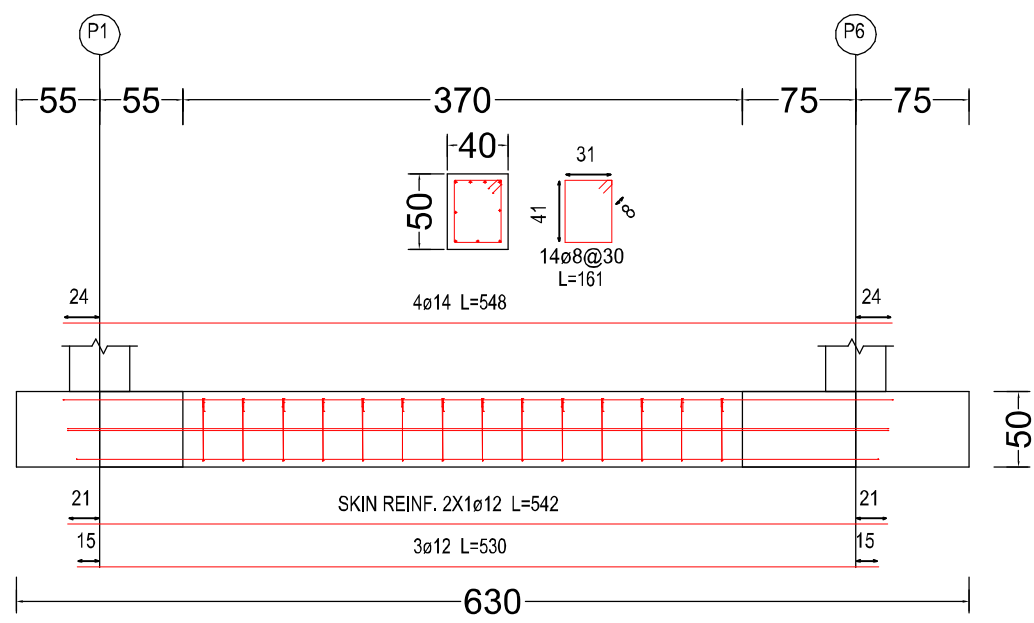
C [P18 - P19]



C [P6 - P7]



VC.T-1 [P1 - P6]



VC.T-1 [P1 - P2]

